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AN AGE-SPECIFIC SCHOOL ATTENDANCE PROFILE FOR DROP-OUT ANALYSIS.

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THE PROBABILITIES OF BEING IN SCHOOL AT EACH AGE, FOR ALL MALE CHILDREN AND FOR CHILDREN FROM FAMILIES WITH LOW INCOMES, ARE PRESENTED IN TABULAR FORM FROM FIGURES OBTAINED FROM "THE UNITED STATES CENSUS OF POPULATION 1960--SCHOOL ENROLLMENT." ANALYSIS SHOWS THAT STUDENTS FROM LOW-INCOME FAMILIES HAVE A SIGNIFICANTLY LOWER TENDENCY TO REMAIN IN SCHOOL. FURTHER ANALYSIS OF AGE-SPECIFIC PROFILES IS NEEDED TO INDICATE THE EXTENT TO WHICH THE DIFFERENCE IS DUE TO INCOME FACTORS ALONE, OR TO FACTORS HIGHLY CORRELATED WITH INCOME. THE POTENTIAL FOR IMPROVING GRADE PROGRESSION BY PROGRAMS ACTING ON CHILDREN OF LOW-INCOME FAMILIES IS INDICATED. EXAMINATION OF THE DATA LEADS TO THE FOLLOWING TENTATIVE HYPOTHESES--(1) DROPOUT IS MORE A FUNCTION OF PARENTAL EDUCATION THAN OF FAMILY INCOME, (2) DROPOUT RATES ARE HIGHER FOR RURAL THAN FOR URBAN CHILDREN, (3) THERE IS NO SIGNIFICANT DIFFERENCE BETWEEN DROPOUT RATES OF WHITE AND NONWHITE CHILDREN FOR ANY GIVEN LEVEL OF PERMANENT FAMILY INCOME AND PARENTAL EDUCATION, (4) POSITIVE CORRELATION EXISTS BETWEEN DROPOUT RATES AND THE TENDENCY TO BE BELOW MODAL GRADE, (5) THERE IS A HIGH NEGATIVE CORRELATION BETWEEN FAMILY INCOME LEVEL AND THE PUPIL BEING BELOW MODAL GRADE FOR HIS AGE GROUP, AND (6) BEING BELOW MODAL GRADE IS A FUNCTION OF PARENTAL EDUCATION. (SK)

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NATIONAL CENTER FOR EDUCATIONAL STATISTICS
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An Age-Specific School Attendance Profile for Drop-out Analysis

Reduction in the drop-out rate is expected to be a major effect of the Title I programs. To predict the possible range of improvement in this measure, the probabilities of being in school at each age, for all male children and for children from families with low incomes are compared. Table 1 shows that children of low income families have a significantly lower tendency to remain in school--the difference indicates tentatively, a range for improvement.* Using the table, we may compute that an average seven year old has a .527 probability of being in school at age 17; however, if he is a member of a low income family, the probability is only .328.

Further analysis of age specific profiles is needed to indicate the extent to which the difference is due to income factors alone, or to other factors highly correlated with income. For example, an examination of the profiles for children of low income families distinguished by level of education of the parent shows that parental education is a major factor causing differences in school enrollment.

It is possible that drop-out rates are highest among the pupils that tend to be below the modal grade of their age group. These pupils are probably the poorer students and also face a greater loss of potential income by remaining in school than the pupils who complete high school with their age group; i.e., at age 17 or 18.

The potential for improving grade progression by programs acting on children of low income families is indicated in the probability profiles shown in Table 2. This table shows the proportion of enrolled pupils from all families as compared with those from low income families that are below the modal grade for their age. For example, at age 16, more than one-third

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*Those not in school include both those that have graduated and those that have dropped out. Eliminating those who have graduated will probably make the comparison even less favorable for low income groups.

of children of low income families are below their modal group i.e., below the 10th grade, while less than 20% of all pupils are below the modal grade. The profiles of the low income pupils differentiated by education of parent shows the probable effects of home environment of educational attainment; the percent of pupils below modal grade is only half as great in low income families where the parent has at least an 8th grade education than in families where the parent has less than an 8th grade education.

Examination of the Census data on school enrollment leads to the following tentative hypotheses:

1. Drop-out is more a function of parental education than of family income;

2. Drop-out rates are higher for rural than for urban children;

3. For a given level of permanent family income and parental education, there is no significant difference between drop-out rates of white and non-white children;

4. There is positive correlation between the tendency to be below modal grade for the age group at age N, and being a drop-out at age N+1;

5. There is a high negative correlation between family income level and the pupil being below modal grade for his age group;

6. Being below modal grade is a function of parental education.

Table 1

Proportions Enrolled in School:

Male Children Living With One or Both Parents

Age	All	Family Income <$3000	Family Income <$3000, Parent Education: <8 yrs	8-11 yrs	12+ yrs
5	.448	.319	.233	.351	.419
6	.835	.736	.660	.772	.825
7	.967	.950	.937	.957	.963
8	.977	.959	.946	.967	.973
9	.977	.959	.946	.967	.973
10	.977	.961	.949	.968	.979
11	.977	.961	.949	.968	.979
12	.977	.961	.949	.968	.979
13	.967	.951	.940	.958	.970
14	.957	.913	.880	.939	.970
15	.939	.895	.862	.921	.952
16	.900	.792	.707	.841	.952
17	.783	.688	.615	.731	.838
18	.599	.506	.442	.534	.748
19	.391	.330	.288	.348	.488

Source: U.S. Bureau of the Census, United States Census of Population 1960: School Enrollment Series PC (2) 5A, Tables 1 and 5; SRI.

Table 2

Percent of Pupils Below Modal Grade
Male Children Living With One or More Parents

Age	All	Family Income <$3000	Family Income <$3000 Parent Education		
			< 8 yrs	8-11 yrs	12+ yrs
7		0	0		
8	4.6	10.1	16.1	6.9	3.5
9	7.4	16.5	26.3	11.3	5.7
10	9.8	21.0	31.4	14.8	7.0
11	10.8	22.9	34.4	16.2	7.7
12	12.3	26.1	39.2	18.4	8.8
13	13.4	28.6	42.8	20.2	9.6
14	16.3	32.6	45.8	23.0	11.9
15	17.7	35.3	49.6	24.9	12.8
16	18.9	35.5	51.2	27.0	14.4
17	16.2	30.5	44.0	23.2	12.4
18	31.1	52.4	66.0	45.8	25.6

Source: U.S. Bureau of the Census, United States Census of Population 1960: School Enrollment Series PC (2) 5A, Tables 1 and 5; SRI.